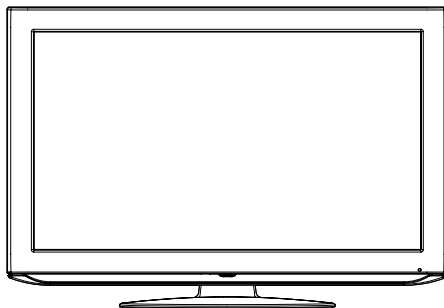# OWNER'S MANUAL

◢◣ SANSUI®

32" TFT LCD DIGITAL TV WITH BD PLAYER

ENGLISH

FHDBDP3209

ATTENTION

If you purchase a universal remote control from your local retailer, please contact the remote manufacturer for the required programming code.

AIR/CABLE MODE SELECTION

When shipped from the factory, the Signal Type option is set to the "Cable" (Cable Television) mode.
If not using Cable TV, set this menu option to the "Air" position.

IF CONTACT WITH CUSTOMER SERVICE IS REQUIRED
PLEASE HAVE THE MODEL NUMBER READY PRIOR TO THE CALL
CUSTOMER SERVICE − 1-800-289-0980

ORION WEBSITE

FOR INFORMATION ON OUR OTHER PRODUCTS, PLEASE VISIT OUR WEBSITE AT

www.orionsalesinc.com

Record the model number and serial number. The numbers are located at the rear of the unit.

Model number _____   Serial number _____

Before operating the unit, please read this manual thoroughly.

ENGLISH

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OPEN FLAMES AWAY FROM THIS PRODUCT AT TIMES.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS POLARIZED PLUG WITH AN EX-TENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by the partly responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

CAUTION:
THIS DIGITAL VIDEO PLAYER EMPLOYS A LASER SYSTEM.

TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS OWNER'S MANUAL CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION-SEE SERVICE PROCEDURE.

USE OF CONTROLS, ADJUSTMENTS OR THE PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

TO PREVENT DIRECT EXPOSURE TO THE LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO THE BEAM.

CLASS 1
LASER PRODUCT

Location of the required Marking
The rating sheet and the safety caution are on the rear of the unit.

CERTIFICATION: COMPLIES WITH FDA RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J.

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

The lamp(s) within this product contain mercury.
Disposal should be in compliance with local, state or federal laws.

This Sansui LCD TV/Blu-ray Combo is in part operated by the Linux OS. The Linux OS contains software that complies with GPL/LGPL. In order to obtain additional information and the source code please visit ORION's website at www.orionsalesinc.com/GPL.

IMPORTANT SAFETY INSTRUCTIONS

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

S3125A

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) Apparatus should not be exposed to dripping or splashing, and objects filled with liquids, such as vases, should not be placed on the apparatus.

16) An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

17) Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

18) Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

19) If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges, Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER THE NATIONAL ELECTRICAL CODE

ANTENNA LEAD IN WIRE

GROUND CLAMP

ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)

GROUNDING CONDUCTORS (NEC SECTION 810-21)

ELECTRIC SERVICE EQUIPMENT

GROUND CLAMPS

NEC-NATIONAL ELECTRICAL CODE S2898A

POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

20) When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part.

Unauthorized substitutions may result in fire, electric shock or other hazards.

21) Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

22) Keep your fingers clear of the disc slot as it is closing. It may cause injury.
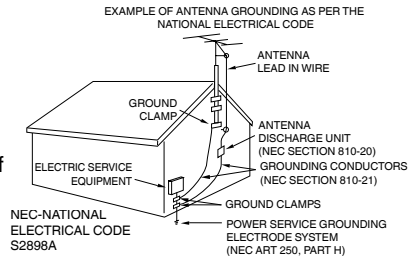
IMPORTANT SAFETY INSTRUCTIONS (continued)

23) When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

24) Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

25) Do not allow the product to output distorted sound for an extended period of time. It may cause speaker overheating and fire.

26) When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.

27) Do not look into the opening of the disc slot or ventilation opening of the product to see the source of the laser beam. It may cause eye damage.

28) Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

29) This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

30) The socket-outlet must be installed near the unit and easily accessible.

CONDENSATION
Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, player's performance will be impaired. To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.
Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.

HOW TO HANDLE THE LCD PANEL
• Do not press hard or jolt the LCD panel. It may cause the LCD panel glass to break and injury may occur.
• If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation.
  If the liquid gets in your mouth, immediately gargle and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

CHILD SAFETY:
It Makes A Difference How and Where You Use Your Flat Panel Display
Congratulations on your purchase! As you enjoy your new product, please keep these safety tips in mind:

THE ISSUE
The home theater entertainment experience is a growing trend and larger flat panel displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
Flat panel displays that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests or carts may fall over and cause injury.

THIS MANUFACTURER CARES!
The consumer electronics industry is committed to making home entertainment enjoyable and safe.

TUNE INTO SAFETY
One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
Carefully read and understand all enclosed instructions for proper use of this product.
Don't allow children to climb on or play with furniture and television sets.
Don't place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
Remember that children can become excited while watching a program, especially on a "larger than life" flat panel display. Care should be taken to place or install the display where it cannot be pushed, pulled over, or knocked down.
Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.

WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:
Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
Follow all instructions supplied by the display and wall mount manufacturers.
If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
Make sure that the wall where you are mounting the display is appropriate to support the weight of the unit/ product and wall mount. If you are unsure, contact a professional installer.
A minimum of two people are required for installation. Flat panel displays can be heavy.

SAFETY PRECAUTIONS

VENTILATION CAUTION
The unit emits heat when in operation. Do not place any covers or blankets on the unit, this may cause overheating. Do not block ventilation holes, or set up near radiators. Do not place in direct sunshine. When placing on a shelf leave 10 cm (4 inches) free space around the entire unit.

Notes when mounting the LCD TV/BD on a wall
If the unit is to be mounted on the wall, contact the retailer where you purchased the LCD TV/BD for advice, and have the equipment professionally installed. Incomplete or improper installation may cause injury to you, and/or damage to the LCD TV/BD.

IMPORTANT NOTICE

Possible Adverse Effects on LCD Panel: If a fixed (non-moving) pattern remains on the LCD Panel for long periods of time, the image can become permanently engrained in the LCD Panel and cause subtle but permanent ghost images. This type of damage is NOT COVERED BY YOUR WARRANTY. Never leave your LCD Panel on for long periods of time while it is displaying the following formats or images:

- Fixed Images, such as stock tickers, video game patterns, TV station logos, and websites.
- Special Formats that do not use the entire screen. For example, viewing letterbox style (16:9) media on a normal (4:3) display (black bars at top and bottom of screen); or viewing normal style (4:3) media on a widescreen (16:9) display (black bars on left and right sides of screen).

The following symptoms are not signs of malfunction but technical limitation. Therefore we disclaim any responsibility for these symptoms.
- LCD Panels are manufactured using an extremely high level of precision technology, however sometimes parts of the screen may be missing picture elements or have luminous spots.
  This is not a sign of a malfunction.
- Do not install the LCD Panel near electronic equipment that is susceptible to electromagnetic waves. Some equipment placed too near this unit may cause interference.
- Effect on infrared devices – There may be interference while using infrared devices such as infrared cordless headphones.

---

* **DVD** is a trademark of DVD Format/Logo Licensing Corporation.
* Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
* Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS and DTS 2.0 + Digital Out are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2008 DTS, Inc. All Rights Reserved.
* HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

VC-1 Patent Portfolio License
THIS PRODUCT IS LICENSED UNDER THE VC-1 PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE VC-1 STANDARD ("VC-1 VIDEO") AND/OR (ii) DECODE VC-1 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE VC-1 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <HTTP://WWW.MPEGLA.COM>.

AVC Patent Portfolio License
THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM

FCC Declaration of Conformity Compliance Statement (Part 15):
The Sansui FHDBDP3209, LCD TV/BD Combination complies with Part 15 of the FCC rules.
Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
The party responsible for compliance to these rules is:
ORION SALES, INC
15 Essex Rd., Paramus, NJ 07652
Ph: 1-800-289-0980

Disc

Playable discs

Disc type and logo mark		content
Blu-ray Video	Blu-ray Disc	Audio + Video (moving pictures)
DVD Video	DVD VIDEO DVD VIDEO	Audio + Video (moving pictures)
CD-DA	COMPACT DISC DIGITAL AUDIO	Audio
The following discs are also available. • DVD-R/RW discs of DVD video format. • CD-R/RW discs of MP3/WMA/JPEG.		

CAUTION:
• Only the left types of discs can be played on this unit. DVD-ROM, CD-ROM, SVCD, CVD, VCD, etc. cannot be played.
• 8cm discs can be played directly. If an 8cm disc adapter is used it will cause errors.
• If you insert an irregular shaped disc, it may get stuck and cause a malfunction.
• The use of a ring protector or other disc accessories will cause errors.
• This unit is to be used exclusively with the NTSC color system. PAL and SECAM system discs cannot be used with this unit.
• Some CD-R/RWs and DVD-R/RW cannot be played back depending on the recording conditions.

Region codes
Blu-ray Discs and DVDs have region codes to help prevent illegal distribution of discs. If the disc's region code does not match the unit's. region code, the disc will not play.
The unit's region code is displayed on the back of the unit. The disc's region code is displayed on the disc or disc packaging.
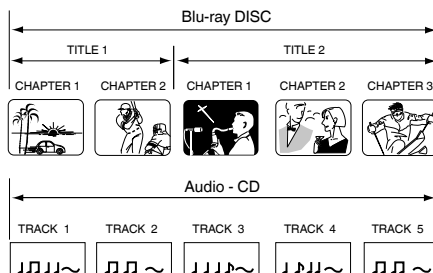
Title
When two or more movies are recorded on a disc, the disc is divided into two or more sections. Each section is called a "TITLE".

Chapter
The titles can be subdivided into many sections.
Each section is called a "CHAPTER".

Track
An Audio CD can contain several items.
These are assigned to the tracks.

Removing Disc from Case
Be sure to hold the edge of disc. Do not touch the surface of the disc.
Pick up the disc gently from the case.

• Do not scratch the disc.
• Do not get dirt on the surface of the disc.
• Do not stick a label or adhesive tape on the disc.
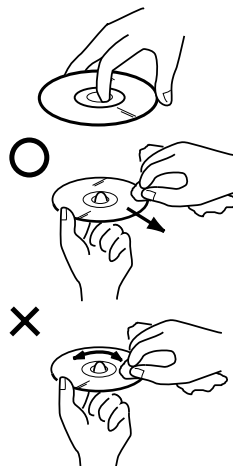• Do not drop or bend the disc.

Storing Disc
• Store the disc in the case to avoid risk of scratches, dirt or damage.
• Do not leave disc exposed to direct sunlight or in hot or humid places.

Cleaning Disc
Wipe the disc with a clean, dry cloth from center to edge.
• Do not wipe the disc in a circular motion.
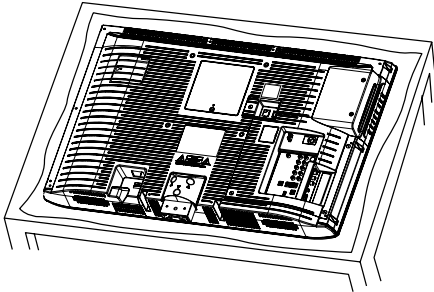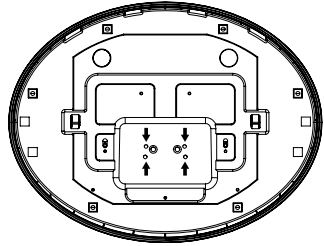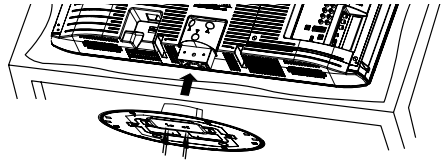• Do not use liquid or aerosol cleaners.

Installing the stand

Tips
• Unplug the AC cord from the **AC INPUT** jack.
• Before beginning this process, make sure that you lay the unit on a clean, safe, and cushioned surface to avoid any damage to the unit.
• Do not touch or press the TV screen. The glass might break under pressure.

To install the stand:
1 Place the unit face down on table, aligning the bottom of the unit with the edge of the table. Place a towel or similar material between the screen and the table to protect the screen.

2 Align the stand assembly with the metal bracket on the bottom of the unit. The bracket will only fit in one direction. Do not touch or apply pressure to the screen. It may break.

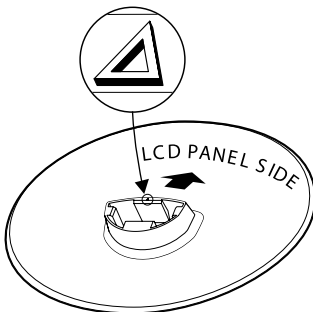3 Place the base on the stand assembly. Make sure that the symbol ▲ is pointing toward the screen side of the unit.

4 Secure the bottom plate with the four provided silver screws (M4×10mm)

Note:
• To remove the stand, reverse these steps.

Contents

Front

POWER indicator
Red : Standby
Blue : On

Remote sensor

Left side

DISC slot

EJECT button

VOLUME +/– buttons

CHANNEL ∧/► (PLAY) button
CHANNEL ∨/■ (STOP) button

MENU button

INPUT/ENTER button

POWER button

To display the menu screen.
Press **MENU** button to display the menu screen.
CHANNEL ∧/∨ buttons, **VOLUME +/–** buttons and **INPUT/ENTER** button can be used to select the desired setting during the menu screen operations.

Location of controls   (continued)

Rear side

AC INPUT jack

USB IN jack

ETHERNET IN jack

RF (ANT) IN jack

DIGITAL AUDIO COAXIAL OUT jack
COMPONENT IN/AUDIO (L/R) IN jack

VIDEO1 IN jack
(VIDEO/S-VIDEO/ AUDIO (L/R))

VIDEO2 IN jack
(VIDEO/ AUDIO (L/R))

HEADPHONE jack

HDMI2 IN jack

VAR (VARIABLE) AUDIO OUT jacks

DVI AUDIO IN jack

VGA AUDIO IN jack   VGA IN jack

HDMI 1/DVI IN jack

Remote control

| POWER ⏻	Power On/Off
DISPLAY/–	Call TV information Call DVD information Input "–" for digital channels
TV/BD	Switch between TV/AV and Blu-ray
EJECT ⏏	Eject a disc
0-9	Direct channel selection of TV Input setting Enter a password
INPUT	Display source selection menu
MUTE	Switch off the sound
CH ⋀/⋁	Select channel of TV
VOL +/–	Adjust volume of TV
TV MENU	Display menu of TV
SETUP	Call up initial setup mode
▲▼◄►	Cursor buttons
ENTER	Enter information in the menu
EXIT	Exit from On-Screen menu
POPUP MENU/ TITLE	In Blu-ray mode, press to open the top menu.
DISC MENU	In Blu-ray mode, press to open the Blu-ray setup menu.
ANGLE	Press to select an alternate viewing angle (if available) on a Blu-ray Disc or DVD.
RANDOM	In Audio CD mode, press to play songs in random order.
RETURN	Press to exit the Blu-ray setup menus.
AUDIO	Press to cycle through the languages available on a Blu-ray Disc.
SUBTITLE	Press to cycle through the available subtitle languages or a Blu-ray Disc or DVD.
REPEAT	Press to repeat the current title, chapter, track, or repeat all.
REPEAT A-B	Press to repeat a specific portion of a Blu-ray Disc, DVD, or CD.
SECONDARY AUDIO	In PIP mode, press to turn the audio for the secondary video on or off.
SECONDARY SUBTITLE	In PIP mode, press to turn the subtitle for the secondary video on or off.
PIP	Press to turn PIP (picture-in-picture) mode on or off.
JUMP	Locating desired scene
CCD	Closed Caption
RECALL	Switch between present/last channel
SLEEP	Sleep timer
SCREEN SIZE	Display SCREEN SIZE menu
STEP	Press to advance one frame at a time on a Blu-ray Disc or DVD. Press **PLAY** to resume normal playback.
SLOW ▶	Press to play forward slowly on a Blu-ray Disc or DVD.
SEARCH ◄◄	Press to fast-reverse on a Blu-ray Disc, DVD, or CD.
PLAY ▶	Press to start playback on a Blu-ray Disc, DVD, or CD.
SEARCH ▶▶	Press to fast-forward on a Blu-ray Disc, DVD, or CD.
SKIP ◄◄	Press to go to the previous chapter on a Blu-ray Disc or DVD or to the previous track on a CD.
PAUSE ‖	Press to pause playback on a Blu-ray Disc, DVD, or CD.
STOP ■	Press to stop disc playback.
SKIP ▶▶	Press to go to the next chapter on a Blu-ray Disc or DVD or to the next track on a CD.
(blue) (red) (green) (yellow)	So Blu-ray Discs (those with Java™) are programmed to use these buttons to access certain playback features. If you insert a Java Blu-ray Disc, follow the on-screen instructions or the documentation that came with the disc.

Remote control   (continued)

Inserting Batteries

1 Open the battery compartment cover in the direction of the arrow.

2 Install two "AA" batteries, paying attention to the polarity diagram in the battery compartment.

3 Replace the compartment cover.
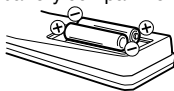
Operation
• Aim the remote control at the remote sensor and press control buttons to operate.
• Operate the remote control within a 30° angle on either side of the remote sensor, up to a distance of approximately 15 feet.

Approximately 15 feet

30° 30°
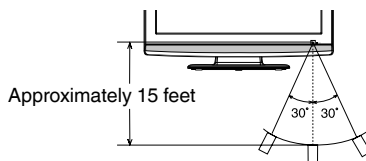
NOTE:
• Do not leave the remote control unit exposed to direct sunlight or in hot or humid places.
• The remote control unit uses infrared beams to transmit signals, so sunlight or fluorescent light on the remote sensor may shorten operating distance.
• Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
• Do not mix old and new batteries.
• Remove batteries if the remote control will not be operated for an extended period of time.

Power source

TO USE AC POWER
1. Connect the AC cord plug into this unit's AC IN jack.
2. Connect the AC cord into an AC outlet.

AC Outlet

AC 120V, 60Hz
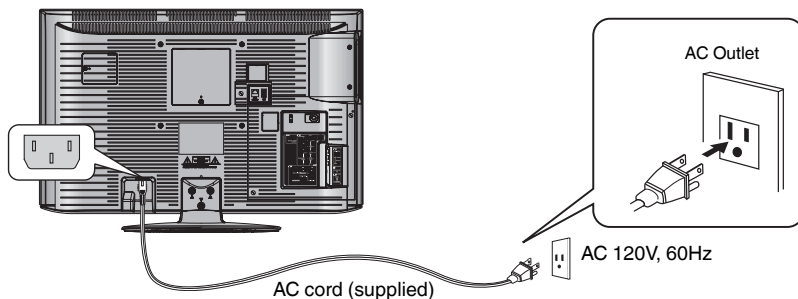
AC cord (supplied)

NOTE:
• Please make sure to insert the cord securely at both the LCD TV/BD and the wall outlet.
• The AC Cord has a grounding-type AC line plug. If the supplied AC cord does not match your AC outlet, contact a qualified electrician, do not defeat the purpose of a grounding plug.

WARNING:
• DO NOT CONNECT THIS UNIT TO THE POWER USING ANY DEVICE OTHER THAN THE SUPPLIED AC CORD. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.
• DO NOT USE WITH A VOLTAGE OTHER THAN THE POWER VOLTAGE DISPLAYED. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.

CAUTION:
• WHEN THIS UNIT IS NOT USED FOR A LONG TIME, (E.G., AWAY ON A TRIP) IN THE INTEREST OF SAFETY, BE SURE TO UNPLUG IT FROM THE AC OUTLET.
• DO NOT PLUG/UNPLUG THE PLUG WHEN YOUR HANDS ARE WET. THIS MAY CAUSE ELECTRICAL SHOCK.
• IF YOU NEED TO REPLACE THE SUPPLIED AC ADAPTER OR AC CORD, THE SPECIFIED ONE IS RECOMMENDED. CONTACT THE DEALER THAT YOU PURCHASED THE UNIT FROM.

Antenna connections

If you are using an indoor or outdoor antenna, follow the instructions below that correspond to your antenna system. If you are using a Cable TV service, see page 14 for Cable TV connections.

Combination VHF/UHF Antenna (Single 75 ohm cable or 300 ohm twin-lead wire)

Antenna Jack

Antenna Jack

75 ohm Coaxial Cable

300-75 ohm Matching Transformer
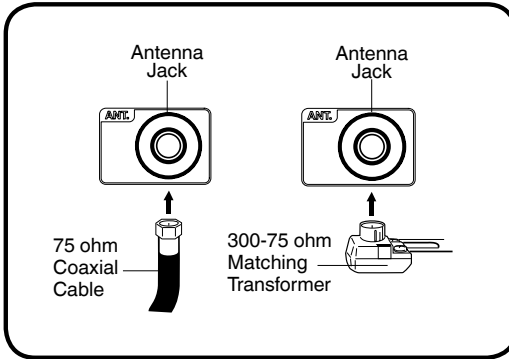
Connect the 75 ohm cable from the combination VHF/UHF antenna to the antenna jack.

If your combination VHF/UHF antenna has a 300 ohm twin-lead wire, the use of the 300-75 ohm matching transformer may be necessary.

Combination VHF/UHF Antenna (Separate VHF and UHF 300 ohm twin-lead wires)

Antenna Jack

Combiner

UHF 300 ohm

VHF 300 ohm

300-75 ohm Matching Transformer
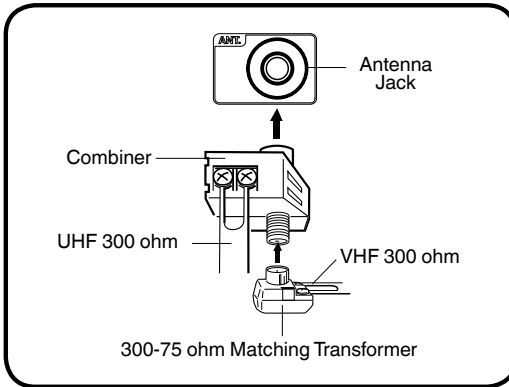
Connect the UHF 300 ohm twin-lead wire to the Combiner (not supplied). Connect the VHF 300 ohm twin-lead wire to the 300-75 ohm Matching Transformer. Attach the Transformer to the Combiner, then attach the Combiner to the Antenna Jack.

Separate VHF/UHF Antennas (75 ohm VHF cable and 300 ohm UHF twin-lead wires)

Antenna Jack

Combiner

UHF 300 ohm
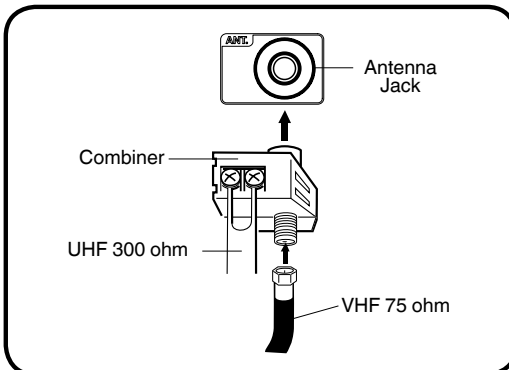
VHF 75 ohm

Connect the VHF 75 ohm cable and UHF 300 ohm twin-lead wire to the Combiner (not supplied). Attach the Combiner to the Antenna Jack.

13

Cable TV connections

This TV has an extended tuning range and can tune most cable channels without using a Cable TV Converter box. Some cable companies offer "premium pay channels" where the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the Cable TV company.

For subscribers to basic Cable TV service
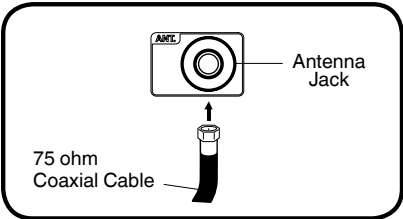
For basic Cable TV service not requiring a Converter/ Descrambler box, connect the 75 ohm Coaxial Cable directly to the Antenna Jack on the back of the TV.

For subscribers to scrambled Cable TV service

If you subscribe to a Cable TV service which requires the use of a Converter/Descrambler box, connect the incoming 75 ohm Coaxial Cable to the Converter/Descrambler box. Using another 75 ohm Coaxial Cable, connect the output jack of the Converter/Descrambler box to the Antenna Jack on the TV. Follow the connections shown below. Set the TV to the output channel of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to select channels.
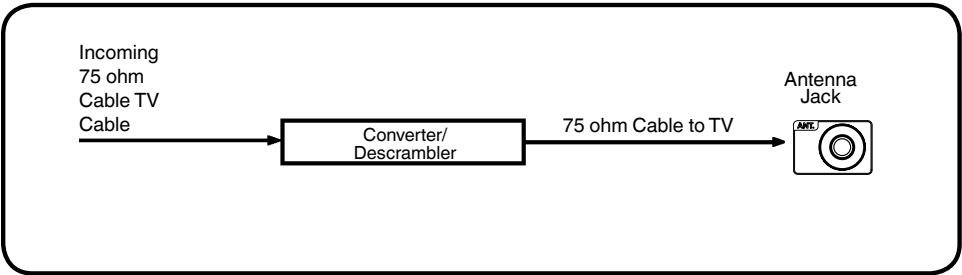
For subscribers to unscrambled Cable TV service with scrambled premium channels

If you subscribe to a Cable TV service in which basic channels are unscrambled and premium channels require the use of a Converter/Descrambler box, you may wish to use a signal Splitter and an A/B Switch box (available from the Cable TV company or an electronics supply store). Follow the connections shown below. With the switch in the "B" position, you can directly tune any nonscrambled channels on your TV. With the switch in the "A" position, tune your TV to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to tune scrambled channels.
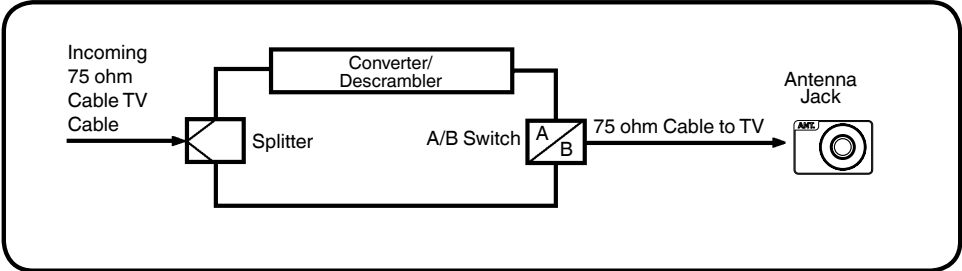
Starting setup

The Starting Setup menu appears the first time you turn on the TV, and assists you to select the menu language, specify the Air/Cable setting, and program your channels automatically.

IMPORTANT: Make sure that the antenna or cable TV system connection is made!

1 To turn on the TV, press **POWER** (POWER indicator on the front of the unit changes blue. It may take approx. 10 seconds for a picture to appear on screen.). The starting setup function begins. Press ◄ or ► to select your desired language.

Auto Setup	
Language	English
Signal Type	Cable
Automatic Search	Start
▲▼ : Select ◄►: Adjust	

2 Press ▲ or ▼ to select "Signal Type", then press ◄ or ► to select "Cable" or "Air".

3 Press ▲ or ▼ to select "Automatic Search", then press ► or **ENTER**.

4 Now the "Auto Setup" starts. After the starting setup is completed, the TV channel appears on the screen.

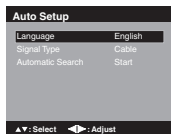   • Depending on the reception condition, it may take from 15 minutes to 30 minutes to complete memorizing digital cable channels. Please be patient.

NOTE:
• If you press **EXIT** in the process of "Auto Setup", the Starting Setup stops and changes to the normal screen.
• When you make a menu selection, your changes occur immediately. You do not have to press **EXIT** to see your changes.
• When you are finished programming the menus, press **EXIT**.

TV operation

1 To turn on the TV, press **POWER**.
   (POWER indicator on the front of the unit changes blue. It may take approx. 10 seconds for a picture to appear on screen.)

2 Adjust the volume level by pressing **VOL +** or **–**. The volume level will be indicated on the screen by blue bars. As the volume level increases, so do the number of bars. If the volume decreases, the number of blue bars also decreases.

3 Set the Signal Type option to the appropriate position (see "Air/Cable selection" on page 18).

4 Press the **Direct Channel Selection (0-9, –)** buttons to select the channel.
   (If you press only channel number, channel selection will be delayed for a few seconds.)

TO SELECT ANALOG CHANNELS
1-9:   Press 1-9 as needed. Example, to select channel 2, press **2**, then press **ENTER**.
10-99:   Press the 2 digits in order. Example, to select channel 12, press **1**, **2**, then press **ENTER**.
100-135: Press the 3 digits in order. Example, to select channel 120, press **1**, **2**, **0**, then press **ENTER**.

TO SELECT DIGITAL CHANNELS
Press the first 3 digits, then press the **–** button, followed by the remaining number.
Example, to select channel 015-001, press **0**, **1**, **5**, **–**, **0**, **0**, **1**, then press **ENTER**.
• If a channel is selected with only audio content, "Audio only" will be displayed on the screen.
• If a channel is selected with a weak digital signal, "Digital channel signal strength is low" will be displayed on the screen.
  The same program may be available on either an analog channel or a digital channel. You may choose to watch either format.
• If a channel is selected to which you have not subscribed, "Digital channel is encrypted" will be displayed on the screen.

VHF/UHF/CABLE CHANNELS

Air	Cable
VHF 2-13	VHF 2-13
UHF 14-69	STD/HRC/IRC
	14-36 (A) (W)
	37-59 (AA) (WW)
	60-85 (AAA) (ZZZ)
	86-94 (86) (94)
	95-99 (A-5) (A-1)
	100-135 (100) (135)
	01 (4A)

NOTE:
• If a channel with no broadcast is selected, the sound will automatically be muted.
• It may take a few seconds for a digital channel picture to appear on screen after being selected.

To select the video input source
To view a signal from another device connected to your LCD TV, such as a VCR player, press **INPUT**, then press ▲/▼ or corresponding **Number buttons (0-7)**, then press **ENTER**. You can select TV, Video 1, Video 2, Component, HDMI1, HDMI2, PC or Blu-ray depending on which input jacks you used to connect your devices.

Source Selection
0.TV
1.Video 1
2.Video 2
3.Component
4.HDMI 1
5.HDMI 2
6.PC
7.Blu-ray
[0-7]:Select
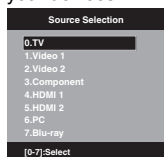
CH +/–
Press and release **CH +/–**. The channel automatically stops at the next channel set into memory.
For proper operation, before selecting channels, they should be set into the memory. See "Memorizing channels" on pages 18 and 19.

DISPLAY

Press **DISPLAY** to display the current information on the screen.

When the TV receives a digital signal, the digital information will appear.

62-001	HDTV Moving Picture1	Sleep Timer
CH-1	TV-14	Off
Digital	Air	◄ English

No Program Information is available

Wide
1080i

- Channel number
- Channel label (if preset)
- V-Chip rating
- Sleep timer
- Program guide
- Resolution
- Station name
- Broadcast program name
- Signal type
- Audio language
- Picture size

When the TV receives an analog signal, the analog information will appear.

14		Sleep Timer
	TV-PG	Off
Analog	Cable	

Mono
Wide
480i

- Channel number
- V-Chip rating
- Sleep timer
- Audio information (Stereo, SAP or Mono)
- Channel label (if preset)
- Signal type
- Picture size
- Resolution

Press **DISPLAY** again to clear the call display.

NOTE:
- After a few seconds, DISPLAY screen will return to normal TV-operation automatically.

RECALL

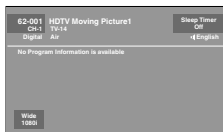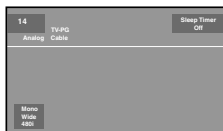This button allows you to go back to the last channel selected by pressing **RECALL**. Press **RECALL** again to return to the last channel you were watching.

MUTE

Press **MUTE** to switch off the sound. The TV's sound will be silenced and "Mute" will appear on the screen. The sound can be switched back on by pressing this button again or the **VOL +** or **–**.

SLEEP

To set the TV to turn off after a preset amount of time, press **SLEEP** on the remote control. The clock will count up 10 minutes for each press of the **SLEEP** button (Off, 5m, 10m, 15m, 30m, 45m, 1h 0m, ..., 4h 0m). After the sleep time is programmed, the display will appear briefly every ten minutes to remind you that the sleep timer is operating. To confirm the sleep timer setting, press **SLEEP** and the remaining time will be displayed for a few seconds. To cancel the sleep timer, press **SLEEP** repeatedly until the display turns to Off.

Quick guide for menu operation

Call menu and for example: Select Language.

1 Press **INPUT** to select TV mode.

2 Press **TV MENU**. The TV menu screen will appear.

Main Menu

Picture	>>
Audio	
Channel	
Lock	
Setup	

▲▼ : Select   ENTER:Set

3 Press ▲ or ▼ to select "Setup", then press ► or **ENTER**.

4 Press ▲ or ▼ to select "Language", then press ◄/► to select the desired language.

…on the following pages the menu can be called in the same way as here.

5 Press **EXIT** to return to the normal screen.

NOTE:
- If no buttons are pressed for more than about 40 seconds, the menu screen will return to normal operation automatically.

Convenience functions

You can change the default settings to convenience use.

Icon	Selected Items		Setup hint
Picture	Picture Setting	Brightness / Contrast / Sharpness / Color / Tint	You can adjust the picture quality to your preference.
		Color Temperature	Bluish (Cool) / Neutral (Normal) / Reddish (Warm)
		Backlight	The Backlight feature adjusts the screen brightness for improved picture clarity.
	DBC *1	On/Off	Use this feature to change the Back light automatically according to the brightness of an image. The Back light will become bright in a bright scene, and will become dark in a dark scene.
	Picture Preference	Vivid	Bright and dynamic picture (factory-set)
		Standard	Standard picture quality (factory-set)
		Theater	Movie-like picture setting (factory-set)
		Custom	Your personal preferences (set by you; see "Picture Setting")
	Picture Size		See page 22.
	Film Mode	On/Off	A smoother motion may be obtained by setting the Film Mode to "On" when you view a Blu-ray or DVD.
	PC Setting	Hor Position / Ver Position	To adjust the horizontal / vertical position of the image on the PC Monitor screen. Each video standard will require a different value for this setting.
		Clock	To minimize any vertical bars or stripes visible on the screen background.
		Phase	This must be adjusted after the frequency has been set optimize picture quality.
		Auto Adjust	To adjust the all PC settings automatically.
	DNR	On/Off	DNR (Digital Noise Reduction) can reduce the roughness of the picture.
Audio	Bass / Treble / Balance		You can adjust the sound quality to your preference.
	MTS	Stereo / SAP / Mono	The multi-channel TV sound (MTS) feature provides high-fidelity stereo sound. MTS also can transmit a second audio program (SAP) containing a second language or other audio information. When the TV receives a stereo or SAP broadcast, the word "Stereo" or "SAP" displays on-screen every time you press **DISPLAY**.
	Surround	On/Off	The dynamic presence and sound created offers a thoroughly enjoyable listening experience.
	Audio Language		When two or more audio languages are included in a digital signal, you can select one of the audio language. (This function is available only for digital broadcast.)
	Digital Audio Mode	RAW	Select this option when your unit is connected to a Dolby Digital amplifier. Your unit outputs original Dolby sound.
		PCM	Select this option when your unit is connected to a PCM amplifier. Your unit converts Dolby sound to PCM sound automatically.
	HDMI1 Audio	HDMI	When you connect the HDMI device to the TV, select this setting.
		DVI	When you connect the DVI device to the TV with analog audio cords, select this setting.
	Speakers	On/Off	Use this feature to turn the TV speakers off when you connect an audio system.
Channel	Add / Delete		See page 18.
	DTV Signal		See page 19.
	Auto Ch Memory		See page 18.
	Ch Label		See page 19.
Lock			See page 20, 21.
Setup	Closed Caption		See page 21.
	Language		You can choose from three different languages (English, Français (French) and Español (Spanish)) for the on-screen displays. Select the language you prefer first, then proceed with the other menu options.
	Video Label		See page 19.
	Auto Shut Off	On/Off	If the Auto Shut Off feature is On, a station being viewed stops broadcasting and the TV is not operated, the TV will automatically shut itself off after 15 minutes.
	Reset		The Reset function returns your settings to the factory settings. "Picture Size", "MTS", "Speakers", "Audio Language" and "HDMI1 Audio" cannot be reset by this function.

Note:
*1 In PC mode, the DBC option is not available.

Memorizing channels

This TV is equipped with a channel memory feature which allows channels to skip up or down to the next channel set into memory, skipping over unwanted channels. Before selecting channels, they must be programmed into the TV's memory. To use this TV with an antenna, set the Signal Type option to the Air mode. When shipped from the factory, this menu option is in the Cable mode.

Air/Cable selection

1 Select "Channel", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Auto Ch Memory", then press ► or **ENTER**.

3 Press ▲ or ▼ to select "Signal Type".

4 Press ◄ or ► to select "Air" or "Cable".

Air - VHF/UHF channels
Cable - CABLE TV channels

```
Auto Ch Memory
Signal Type              Cable
Automatic Search         Start


▲▼ : Select    ◄▶ : Adjust
```
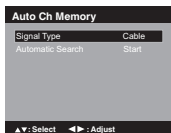
CABLE CHART
The chart below is typical of many cable system channel allocations.

Number on this TV																		
Corresponding CABLE channel					14	15	16	17	18	19	20	21	22				
					A	B	C	D	E	F	G	H	I				
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
J	K	L	M	N	O	P	Q	R	S	T	U	V	W	AA	BB	CC	DD
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV
59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
WW	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ	KKK	LLL	MMM	NNN	OOO	PPP	QQQ
77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
RRR	SSS	TTT	UUU	VVV	WWW	XXX	YYY	ZZZ	86	87	88	89	90	91	92	93	94
95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
A-5	A-4	A-3	A-2	A-1	100	101	102	103	104	105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130
113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130
131	132	133	134	135													
131	132	133	134	135													

NOTE:
• It may take a few seconds for a digital channel picture to appear on screen after being selected.

Automatic search

1 Select "Channel", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Auto Ch Memory", then press ► or **ENTER**.

3 Press ▲ or ▼ to select "Automatic Search", then press ► or **ENTER**.

```
Auto Ch Memory
Signal Type              Cable
Automatic Search         Stop

Analog Channel Found : 7
Digital Channel Found : 5
>>Programming Now<<
▲▼ : Select    ENTER:Cancel
```
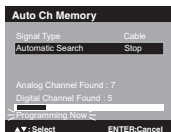
4 The TV will begin memorizing all the channels available in your area.
   • It may take from 15 minutes to 30 minutes to complete memorizing digital cable channels. Depending on the reception condition, a bar display may not advance for several minutes, please be patient.

NOTE:
• Memorizing channels is best accomplished during evening "PRIMETIME" hours, as more stations are broadcasting digital signals. Memorizing channels can only be accomplished while a station is broadcasting a digital signal to set that channel into memory.
• If you are unsure of the digital channels available in your area, you may visit www.antennaweb.org to receive a list based on your address or zip code. Should you require further assistance you may call our toll-free customer service line at 1-800-289-0980.
• New digital channels may be added to your area periodically, it is recommended to perform the "Automatic Search" procedure regularly.

Adding Channel
If you find a new digital channel unregistered, you can add the new channel into the channel memory.

1 Tune in the new channel.

2 Select "Channel", then press ► or **ENTER**.

3 Press ▲ or ▼ to select "Add/Delete", then press ► or **ENTER**.

```
Add/Delete
Adding Channel           >>
Add/Delete               >>
Clear All                >>


▲▼ : Select    ENTER:Set
```
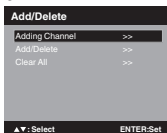
4 Press ▲ or ▼ to select "Adding Channel", then press ► or **ENTER**. The new channel will be added into the channel memory.

Add/Delete channel
You can select the channel that you want to skip.

1 Select "Channel", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Add/Delete", then press ► or **ENTER**.

3 Press ▲ or ▼ to select "Add/Delete", then press ► or **ENTER**.

4 Press ▲ or ▼ to select the channel that you want to skip.

```
Add/Delete
▲  CH      Signal
   2       Analog      Add
   3       Analog      Add
   3-001   Digital     Delete
   3-002   Digital     Add
   4       Analog      Delete
▼
▲▼ : Select    ◄▶ : Adjust
```

5 Press ◄ or ► to select "Add" or "Delete", whichever function you want to perform.

6 Repeat steps 4 - 5 for other channels you want to add or delete.

Clear All

All channels are deleted from the channel memory.

1 Select "Channel", then press ► or **ENTER**.

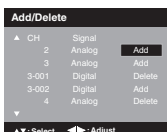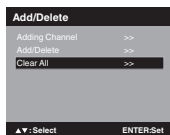2 Press ▲ or ▼ to select "Add/Delete", then press ► or **ENTER**.

3 Press ▲ or ▼ to select "Clear All", then press ► or **ENTER**.

```
Add/Delete

Adding Channel        >>
Add/Delete            >>
Clear All             >>


▲▼ : Select         ENTER:Set
```

Checking the digital-signal strength

This TV will allow you to view the digital signal meter for digital channels.

1 Select "Channel", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "DTV Signal".

3 Press ► or **ENTER** to check the Digital-signal strength.
The Digital-Signal strength screen will appear.
If necessary, adjust the direction of the antenna to obtain the maximum signal strength.

```
DTV Signal



                    0      50      100
Signal Level  ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
```
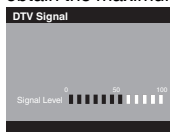
NOTE:
• Signal meter feature is not available for analog channels.
• After 240 seconds, DTV Signal screen will return to normal TV-operation automatically.
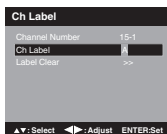
Labeling channels

Channel label appear with the channel number display each time you turn on the TV, select a channel, or press DISPLAY.
You can choose any four characters to identify a channel.

To create channel labels

1 Select "Channel", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Ch Label", then press ► or **ENTER**.
The "Ch Label" menu will appear.

3 Press ◄ or ► to select a channel you want to label, then press ▼.

```
Ch Label

Channel Number        15-1
Ch Label
Label Clear           >>



▲▼ : Select    ◄▮► : Adjust
```

4 Press ◄ or ► repeatedly until the character you want appears in the first space.

```
Ch Label

Channel Number        15-1
Ch Label              A
Label Clear           >>



▲▼ : Select   ◄▮► : Adjust   ENTER:Set
```

The characters rotation as follows:

$$0 \cdots 9 \leftrightarrow A \cdots Z \leftrightarrow - \ . \ , () @ / + = - \ \leftarrow$$
$$\rightarrow \text{SPACE} \leftarrow$$
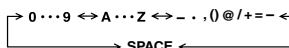
If the character which you desire appears, press **ENTER**.
Repeat this step to enter the rest of the characters.
If you would like a blank space in the label name, you must choose the empty space from the list of characters.

5 When you finish inputting the label name, press **EXIT** to return to the normal screen.

6 Repeat steps 3-4 for other channel. You can assign a label to each channel.

To clear a Ch Label
After step 3 above, press ▲ or ▼ to select "Label Clear", then press ► or **ENTER**.

NOTE:
• The channel labels will be reset after "Automatic Search" on page 18.

Labeling video inputs

The Video Label feature allows you to label each input source for your TV.

1 Select "Setup", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Video Label", then press ► or **ENTER**.

3 Press ▲ or ▼ to select an input which you want to label.

4 Press ◄ or ► to select the desired label for that input source.

```
Video Label

Video1                -
Video2                -
Component             -
HDMI1                 -
HDMI2                 -

▲▼ : Select    ◄▮► : Adjust
```

–	: Uses the default label name
VCR	: Video cassette recorder
DVD	: DVD video
DTV	: Digital TV set-top box
SAT	: Satellite box
CABLE	: Cable box
HD	: HDMI device (only for HDMI inputs)

19

Setting the V-Chip

An age limitation can be set to restrict children from viewing or hearing violent scenes or pictures that you may choose to exclude. The restriction applies to "TV Rating" and "Movie Rating" if this data is transmitted. You may set this restriction separately. To use the V-Chip function, you must register a password.

To register a password

1 Select "Lock", then press ► or **ENTER**.

2 Select and enter your password (4 digits) using **Number buttons (0-9)**, then press **ENTER**.

Lock	
New Password	* * *_
[0-9] : Select	ENTER:Set
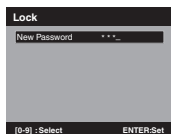
"∗" appears instead of the number.

3 Enter the same password again to confirm, then press **ENTER**.
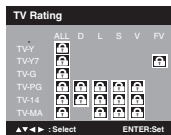The password is now registered.

NOTE:
• If you forget the password, contact Customer Service at 1-800-289-0980 for assistance.
Your original remote control will be required.
• To avoid forgetting the password, write it down and keep in a safe place.

To set the V-Chip

1 Select "Lock" menu, then press ► or **ENTER**.

2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. Then Lock menu will appear.

3 Press ▲ or ▼ to select "V-Chip", then press ◄ or ► to select "On".

4 Press ▲ or ▼ to select "V-Chip Set", then press ► or **ENTER**.
The V-Chip Set Menu appears.

5 Press ▲ or ▼ to select which rating will be used, then press ► or **ENTER**. Each rating below will appear.
TV Rating

| TV Rating	ALL	D	L	S	V	FV
TV-Y	🔒					
TV-Y7	🔒					🔒
TV-G	🔒					
TV-PG	🔒	🔒	🔒	🔒	🔒	
TV-14	🔒	🔒	🔒	🔒	🔒	
TV-MA	🔒	🔒		🔒	🔒	
▲▼◄► : Select				ENTER:Set		

You can set the rating using age level and genre.

Age:
TV-Y	: All children
TV-Y7	: 7 years old and above
TV-G	: General audience
TV-PG	: Parental guidance
TV-14	: 14 years old and above
TV-MA	: 17 years old and above

Genre:
ALL	: All
D	: Dialogue
L	: Language
S	: Sex
V	: Violence
FV	: Fantasy Violence

Movie Rating

Movie Rating	
G	🔒
PG	🔒
PG-13	🔒
R	🔒
NC-17	🔒
X	🔒
▲▼ : Select	ENTER:Set
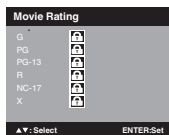
G	: All ages
PG	: Parental guidance
PG-13	: Parental guidance less than 13 years old
R	: Under 17 years old parental guidance suggested
NC-17	: 17 years old and above
X	: Adult only

6 Press ▲/▼/◄/► to select the desired rating, then press **ENTER**.

7 Press **EXIT** to return to the normal screen.
V-Chip function is activated now.

To use the TV after the TV is protected.
When a program is received that is blocked by the V-Chip, press **MUTE**, then enter your password. The protection will be temporarily overridden. If the TV is turned off or the channel is changed, the V-Chip restriction will be reactivated.

NOTE:
• The V-Chip function is activated only on programs and input sources that include a rating signal.

To change the password

1 Select "Lock", then press ► or **ENTER**.

2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. The Lock menu will appear.

3 Press ▲ or ▼ to select "Change Password", then press ► or **ENTER**.
The Change Password screen will appear.

4 Enter a new password using **Number buttons (0-9)**, then press **ENTER**.

5 Enter the same password again to confirm, then press **ENTER**.
The password is now registered.

Downloading the additional V-Chip rating system
As a supplement to the standard V-Chip rating system, your television will be able to download an additional rating system, if such a system becomes available in the future.

To download the additional V-Chip rating system (when available)

1 Select "Lock", then press ► or **ENTER**.

2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. The Lock menu will appear.

3 Press ▲ or ▼ to select "V-Chip", then press ◄ or ► to select "On".

4 Press ▲ or ▼ to select "V-Chip Set (DTV)", then press ► or **ENTER**.

5 If the TV is not storing the additional rating system, the TV will begin downloading it, which may take some time to be completed.

6 Set your preferred content rating limits for the additional rating system.

7 You also need "Update" procedure to update rating information.

NOTE:
• You can only download the additional V-Chip rating system when your TV is receiving a digital signal.
• When you download the additional rating system, it may take some time for the download to occur.
• The V-Chip rating information and system are not determined or controlled by the TV.
• The standard V-Chip rating system is available whether your TV is receiving a digital signal or not, and will block both analog and digital programs. To set the restriction level using the standard V-Chip rating system, select V-Chip Set in step 4.
• The downloadable V-Chip rating system is an evolving technology, and availability, content, and format may vary.
• You cannot select this feature if the TV is not receiving a digital signal for the current station.

To clear the all V-Chip settings

1 Select "Lock", then press ► or **ENTER**.

2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. The Lock menu will appear.

3 Press ▲ or ▼ to select "V-Chip Clear", then press ► or **ENTER**.
The Password screen will appear.

4 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. All of your settings return to the factory settings.

Closed Caption

WHAT IS CLOSED CAPTIONING?

This television has the capability to decode and display Closed Captioned television programs. Closed Captioning will display text on the screen for hearing impaired viewers or it will translate and display text in another language.

Captions: This Closed Caption Mode will display text on the screen in English or another language. Generally, Closed Captions in English are transmitted on C1 and Closed Captions in other languages are transmitted on C2.
Text: The Text Closed Caption Mode will usually fill 1/2 of the screen with a programming schedule or other information.

1 Select "Setup", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Closed Caption", then press ► or **ENTER**.
The Closed Caption menu will appear.

3 Press ◄ or ► to set "CC Setting" to "On".
On: Captions will be displayed on the screen.
Off: Captions will not be displayed on the screen.

4 Press ▲ or ▼ to select "Analog Caption" or "Digital Caption".

When you select "Analog Caption", you can choose C1, C2, C3, C4, T1, T2, T3 and T4.

When you select "Digital Caption", you can choose from CS1, CS2, CS3, CS4, CS5 and CS6.

5 Press ◄ or ► to select the desired Closed Caption mode for both Digital and Analog Caption.

6 Press ▲ or ▼ to select "CC Priority", then press ◄ or ► to select "Digital CC" or "Analog CC".

NOTE:
• Depending on the broadcast signal, some Analog Captions will function with a Digital broadcast signal. This step prevent that two kind of captions are overlapping.

NOTE:
• If the program or video you selected is not closed-captioned, no captions will display on-screen.
• If text is not available in your viewing area, a black rectangle may appear on-screen. If this happens, set the CC Setting to "Off".
• When selecting Closed Captions, the captioning will be delayed approx. 10 seconds.
• If no caption signal is received, no captions will appear, but the television will remain in the Caption Mode.
• Misspellings or unusual characters may occasionally appear during Closed Captioning. This is normal with Closed Captioning, especially with live programs. This is because during live programs, captions are also entered live. These transmissions do not allow time for editing.
• When Captions are being displayed, on-screen displays, such as volume and mute may be seen but may interfere with Closed Captions.
• Some cable systems and copy protection systems may interfere with the Closed Captioned signal.
• If using an indoor antenna or if TV reception is very poor, the Closed Caption Decoder may not appear or may appear with strange characters or misspelled words. In this case, adjust the antenna for better reception or use an outdoor antenna.
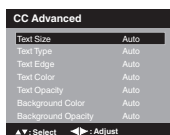
CC advanced

When you have selected Custom as the display method, you can adjust the various setting listed below as follows:

This feature is designed to customize Digital Captions only.

1 Select "Setup", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Closed Caption", then press ► or **ENTER**.
The Closed Caption menu will appear.

3 Press ◄ or ► to set "CC Setting" to "On".

4 Press ▲ or ▼ to select "Digital CC Preset", then press ◄ or ► to select "Custom".

5 Press ▲ or ▼ to select "CC Advanced", then press ► or **ENTER**.
The CC Advanced menu will appear.

6 Press ▲ or ▼ to select the desired item, then press ◄ or ► to change the setting.

```
CC Advanced
Text Size            Auto
Text Type            Auto
Text Edge            Auto
Text Color           Auto
Text Opacity         Auto
Background Color     Auto
Background Opacity   Auto
▲▼ : Select    ◄► : Adjust
```

You can select from among the following items and parameters.

|	
Text Size:	Auto, Small, Standard, Large
Text Type:	Auto, Style1, Style2, Style3, Style4, Style5, Style6, Style7
Text Edge:	Auto, None, Raised, Depressed, Uniform, Left Shadow, Right Shadow
Text Color:	Auto, Black, White, Red, Green, Blue, Yellow, Magenta, Cyan
Text Opacity:	Auto, Solid, Transparent, Translucent, Flashing
Background Color:	Auto, Black, White, Red, Green, Blue, Yellow, Magenta, Cyan
Background Opacity:	Auto, Solid, Transparent, Translucent, Flashing

NOTE:
• You cannot set both "Text Color" and "Background Color" as a same color.
• You cannot set both "Text Opacity" and "Background Opacity" to "Transparent".

Setting the picture size

You can view a variety of picture sizes— Normal, Zoom, Wide, Cinema, Panorama and Native.

Selecting the picture size

1 Select "Picture", then press ► or **ENTER**.

2 Press ▲ or ▼ to select "Picture Size", then press ► or **ENTER** to display Picture Size menu. Press ▲/▼ or corresponding **Number buttons (0-4)** to select the desired picture size, as described below.
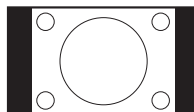
```
Picture Size
0.Normal
1.Zoom
2.Wide
3.Cinema
4.Panorama

[0-4]:Select
```
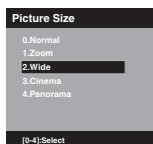
NOTE:
• Selectable picture sizes may vary depending on the input source or broadcast signal.
• Picture Size menu also can be displayed by pressing **SCREEN SIZE** on the remote control.

Normal
In some cases, this image will display the size of standard 4:3 with a black side bar.


Zoom (for 4:3 format programs)
To fill the screen, the right and left edges are extended, however; the center of the picture remains near its former ratio.
The top and bottom edges of the picture may be hidden.
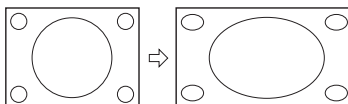
Wide (for letter box programs with subtitles)
To fill the width of the screen, it is extended horizontally. However; it is only slightly extended at the top and the bottom.

The top and bottom edges of the picture may be hidden.
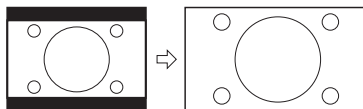
Cinema (for letter box programs with subtitles)
To fill the width of the screen, it is extended horizontally. However; it is only slightly extended at the top and the bottom.
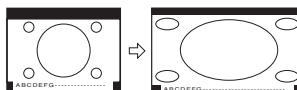
The top and bottom edges of the picture may be hidden.

Panorama (for 16:9 source programs)
Full will display the picture at the maximum size.
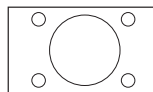
Native (for PC mode only)
Detects the resolution of the signal of the image and it will be shown on the screen with same amount of pixels.

NOTE:
• Some High Definition and/or Digital broadcasts may not allow you to change the picture size.
• In PC Mode, only the Normal, Wide and Native picture size features are available. In PC Mode (WXGA and FHD), only the Wide and Native picture size features are available.

Using the Blu-ray Disc player

Playing a disc

1 Turn on the unit, wait 30 seconds, press **TV/BD** to select BD mode.

2 Place the disc in the disc slot with the label side facing forward. (If the disc has a label.) Hold the disc without touching either of its surfaces, align it with the guides, and place it in position.

3 On the screen, "Loading Disc" and then playback will commence.
   • A menu screen may appear on the TV screen, if the disc has a menu feature. In this case, press ▲, ▼, ◄, ► or **ENTER** to operate a menu feature.

4 Press **STOP** ■ to end playback.
   • The unit memorizes the stopped point, depending on the disc. Press **PLAY** ► to resume playback (from the scene point).
   • If you press **STOP** ■ again (" ■" appears on the screen) or unload the disc, the unit will clear the stopped point.

5 Press **EJECT** ▲.
   Remove the disc and then press **POWER** ⏻.
   The unit turns off.
   When you eject the disc, you may hear mechanism noise, but it is not malfunction.

NOTE:
• Some discs may take a minute or so to start playback.
• If an 8 cm disc is placed into the disc slot and picture playback or menu display does not begin automatically, press **PLAY** ►.
• A "Prohibition" symbol "🚫" may appear at the upper right of the screen. This symbol means either the feature you tried is not available on the disc, or the unit cannot access the feature at this time. This does not indicate a problem with the unit.
• If you place a single-faced disc label backwards (i.e. the wrong way) and then "No Disc" will be displayed.
• Some playback operations of BDs may be intentionally fixed by software producers. Since this unit plays BDs according to the disc content recorded, some playback features may not be available. Also refer to the instructions supplied with the BDs.

Using Media Launcher

When you connect a USB drive and turn on the unit, the Media Launcher menu appears at the top of the screen. On the Media Launcher menu, you can select the optical disc tray or a connected USB device for playback.

NOTE:
• At least one available media type must be in the unit for Media Launcher menu to appear.

Caution:
• Compatible USB devices are flash memory. Some USB devices may not be recognized correctly. Insignia does not guarantee compatibility with all mass storage devices and assumes no responsibility for any loss of data that may occur with a device is connected to unit.

To select the playback source:

1 To turn on the unit, press **POWER**.

2 Press **TV/BD** to select Blu-ray mode. The Media Launcher will appear.

3 Press ▲ or ▼ to select "Optical Disc" or "USB", then press **ENTER**.

NOTE:
• To select "Optical Disc", a disc must be in the disc slot. To select "USB", a USB drive must be connected to unit.

After selecting USB from the Media Launcher menu, unit automatically starts the system update procedure if the USB drive contains system update files. If system update files are not detected the first time you connect the USB drive, the USB Function Select menu will appear, as shown in Step 4.

4 If the USB Function Select menu will appear, press ▲ or ▼ to select an option, then press **ENTER**.
   You can select:

   • **File Playback**—The DISC NAVIGATOR MENU appears and lets you select the type of files you want to play. See "MP3/WMA/JPEG and Audio CD playback" on page 25 and "Viewing JPEG files" on page 27.
   • **BDLive Storage**—Uses the USB drive for Blu-ray players virtual file system (VFS).
   • **Go Back**—Returns to the Media Launcher menu.

NOTE:
- If you want to use the USB drive for storage, you must select "BDLive Storage" each time you turn off then turn on unit.
- To use the BDLive feature, you must select "BDLive Storage" and you must be connected to the Internet.
- The time it takes to access and download BDLive information depends on your connection speed and the file size.
- To play files in HD-format, use a USB 2.0 flash drive.

Special playback

Fast Forward Playback
Press **SEARCH ▶▶** during normal playback.
Each press of **SEARCH ▶▶** will increase the speed of the search Fast 1 (x 2), Fast 2 (x 4), Fast 3 (x 8), Fast 4 (x 16), Fast 5 (x 32), Fast 6 (x 64), Fast 7 (x 128).

- To resume normal playback, press **PLAY ▶**.

Review Playback
Press **SEARCH ◀◀** during normal playback.
Each press of **SEARCH ◀◀** will increase the speed of the search Fast 1 (x 2), Fast 2 (x 4), Fast 3 (x 8), Fast 4 (x 16), Fast 5 (x 32), Fast 6 (x 64), Fast 7 (x 128).

- To resume normal playback, press **PLAY ▶**.

Still Playback
Press **PAUSE II** during normal playback to pause playback.

- To resume normal playback, press **PLAY ▶**.

Frame Advance
Press **PAUSE II** or **STEP** during still playback.
One frame is advanced each time you press **STEP**.

- To resume normal playback, press **PLAY ▶**.

Slow-motion Playback
Press **SLOW I▶** during normal playback or still playback.
Each press of **SLOW I▶** will change the speed of the slow x1/2, x1/4, x1/8.

- To resume normal playback, press **PLAY ▶**.
- To resume the still playback, press **PAUSE II**.

Locating a chapter or track
Press **SKIP ▶▶I** Forward or **SKIP I◀◀** Reverse during playback to locate a chapter that you want to watch. Each time you press the button, a chapter or track is skipped.

NOTE:
- The unit is capable of holding a still video image or On screen display image on your television screen indefinitely. If you leave the still video image or On screen display image displayed on your TV for an extended period of time, you risk permanent damage to your television screen.
- There may be a slight delay between when you press the button and the function activating.

Status display of disc

1 While a disc is playing, press **DISPLAY**. Each time you press this button, the display changes as follows:

- Title Elapsed (first button press)
- Title Remain (second button press)
- Chapter Elapsed (third button press)
- Chapter Remain (forth button press)

2 To make the status display screen disappear, press **DISPLAY** again.

NOTE:
- This display disappears at title change in DVD or Blu-ray Disc playback.

Repeat playback

Title, chapter Playback

Press **REPEAT**. The first time you press this button, unit repeats the current title. The second time you press this button, unit repeats the current chapter. The third time you press this button, unit resumes normal playback.

A-B Repeat Playback:
A-B repeat playback allows you to repeat material between two selected points.

1 Press **REPEAT A-B** during playback.
The start point is selected.

2 Press **REPEAT A-B** again.
The end point is selected. Playback starts at the point that you selected. Playback stops at the end point, returns to Point A automatically, then starts again.

3 To resume normal playback press **REPEAT A-B** again.

NOTE:
- Some discs may not work with the repeat operation.
- In A-B repeat mode, subtitles near point A or B may not appear.
- During the A-B Repeat Playback the ANGLE feature will not operate.
- You may not be able to set A-B Repeat, depending on the scenes of the DVD/BD.
- A-B Repeat does not work with an interactive DVD/BD, MP3/WMA/JPEG-CD.

Changing soundtrack language

You can select the language when you play a multilingual disc.

1 Press **AUDIO** during playback.

The current soundtrack language will appear.

2 Press **AUDIO** repeatedly until the desired language is selected.

The on-screen display will disappear after a few seconds.

NOTE:
- If the desired language is not heard after pressing **AUDIO** several times, the language is not recorded on the disc.
- Changing soundtrack language is canceled when you eject the disc.
  The initial default language or available language will be heard if the disc is played back again.

Locating desired scene

1   Press **JUMP** one or more times to select:
   - **TITLE: - - -** (first button press)
   - **CHAPTER: - - -** (second button press)
   - **TIME: --: -- : --** (third button press)

2   Press the number buttons to enter the title number, chapter number, or amount of elapsed time, then press **ENTER**. Unit goes to the title, chapter, or elapsed time you specified.

Subtitles

Turning the subtitles on and off
When playing back a disc recorded with subtitles, you can turn the subtitles on or off.

Press **SUBTITLE** during playback until "Off" appears.

Changing the subtitle language
You can select the language when playing back a disc recorded with multilingual subtitles.

1   Press **SUBTITLE** repeatedly during playback until your desired language appears.

2   The on-screen display will disappear after a few seconds.

NOTE:
- Changing subtitle language is canceled when you eject the disc.
- Some functions may not work on some DVD/BDs. You may not be able to turn subtitles on or off or change subtitles. While playing the DVD/BD, the subtitle may change when:
  - you eject the disc.
  - you change the title.
- In some cases, the subtitle language is not changed to the selected one immediately.

Changing angles

When playing back a disc recorded with multi-angle facility, you can change the view angle.

1   Press **ANGLE** during playback.

   The current angle will appear.

2   Press **ANGLE** repeatedly until the desired angle is selected.

NOTE:
- Depending on the DVD/BD, you may not be able to change the angles even if multi-angles are recorded on the DVD/BD.

Using PIP (picture-in-picture) mode

Some Blu-ray Discs and DVDs are compatible with picture-in-picture (PIP) mode. In PIP mode, the primary video is displayed on the full screen, and the secondary video is displayed in a small window.

Primary video
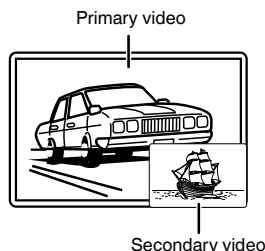
Secondary video

See the documentation that came with the disc for playback instructions.

1   Press **PIP** to turn PIP mode on or off.

2   If PIP mode is on, press **SECONDARY AUDIO** to turn the audio for the video in the PIP window on or off.

MP3/WMA/JPEG and Audio CD playback

This player can play back MP3/WMA/JPEG-data which has been recorded on CD-R or CD-RW. To produce MP3/WMA/JPEG-data, you need a Windows-PC with CD-ROM drive and MP3/WMA/JPEG-encoding software (not supplied). The Apple-HFS-System cannot be played.

MP3/WMA/JPEG CD information
Limitations on MP3/WMA/JPEG CD playback
- MP3/WMA/JPEG CD is the disc that is standardized by ISO9660, its file name must include 3-digit extension letters, "mp3", "wma", "jpg".
- The directory and file names of MP3/WMA/JPEG CD must correspond to ISO standardized files.
- This unit can read 4000 files per directory. If one directory has more than 4000 files, it reads up to 4000 files, the remaining files will be omitted.
- MP3/WMA CDs cannot be used for playback for the purpose of recording.
- It may take more than one minute for this unit to read MP3/WMA/JPEG files depending on its structure.
- Music recorded by "Joliet Recording Specification" can be played back.
- The music files recorded by "Hierarchical File System" (HFS) cannot be played.
- The unit can play back baseline and progressive JPEG files.

Notes on MP3/WMA/JPEG files

To play back MP3/WMA/JPEG CD in the recorded order,

1. Use MP3/WMA/JPEG software that records data alphabetically or numerically.
2. Name each file including a two-digit or three-digit number (e.g. "01" "02" or "001" "002").
3. Refrain from making too many sub-folders.

CAUTION:

- Some MP3/WMA/JPEG CDs cannot be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3/WMA/JPEG files cannot be played back.

MP3/WMA/JPEG CD and Audio CD playback:

1 Insert a disc that contains MP3 or WMA files. A menu will appear.
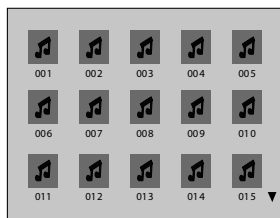
2 Press ▲/▼/◄/► to select the file you want to play, then press **ENTER**. The file plays and information about the file appears.
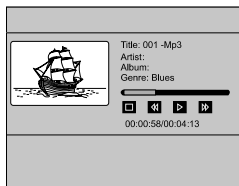
NOTE:

- You can also press **DISC MENU** to select a popup menu, press ▲ or ▼ to select Play, then press **ENTER** to start playback.

To control MP3 or WMA playback:

- To pause playback, press **PAUSE II**.
- To stop playback, press **STOP ■**.
- To fast forward or fast reverse, press **SEARCH ►►** (forward) or **SEARCH ◄◄** (reverse).
- Within four seconds of starting playback of a file, press **SKIP I◄◄** to go to the previous file. After four seconds of playback, press **SKIP I◄◄** to go to the beginning of the file and press **SKIP I◄◄** again to go to the previous file. Each press of **SKIP ►►I** skips the current file and plays to the next file.
- To return to the previous menu, press **RETURN**.
- To select a menu that lets you control playback, press **DISC MENU**. The Disc menu only works when MP3 or WMA files are not playing.

To create an MP3 or WMA playlist:

1 Stop MP3 or WMA playback.

2 Press **DISC MENU**. A popup menu will appear.

3 Press ▲ or ▼ to select "Playlist", then press ►.

4 Press ▲ or ▼ to select "Add to Playlist", then press ►.

5 Press ▲ or ▼ to select:

- **This**—Adds the current file to the playlist.
- **All**—Adds all files to the playlist.
- **Select**—Adds the selected files to the playlist.

6 Press **ENTER** to confirm your selection.

To view a playlist:

1 Press **DISC MENU**. A popup menu will appear.

2 Press ▲ or ▼ to select "Playlist", then press ►.

3 Press ▲ or ▼ to select "View Playlist", then press **ENTER**.

To delete a file from an MP3 or WMA playlist:

1 Stop playback.

2 Press **DISC MENU**, press ▲ or ▼ to select "Playlist", then press ►.

3 Select **Remove From Playlist**, then press ►.

4 Press ▲ or ▼ to select:

- **This**—Deletes the current file from the playlist.
- **All**—Deletes all files from the playlist.
- **Select**—Deletes the selected files from the playlist.

5 Press **ENTER** to confirm your selection.

To control MP3 or WMA playlist playback:

- To play a playlist, press **DISC MENU**, press ▲ or ▼ to select "Play", then press **ENTER**.
- To set the play mode, press **DISC MENU**, select "Set Play Mode". Press ►, then select "Normal" or "Shuffle". "Normal" plays the files in the order they were added to the list. "Shuffle" plays the files in random order.
- To set the audio mode, press **DISC MENU**, select "Set Audio Mode", press to select "None", "Repeat", or "Loop". None plays the files in the order they were added to the list, and when the last file plays, playback stops. Repeat repeats the current file. Loop plays the files in the order they were added to the list, and when the last file plays, playback begins again with the file at the beginning of the list.

Viewing JPEG files

To view JPEG files:

1 Insert a disc with JPEG files into your unit.

2 Press ▲/▼/◄/► to select the file you want to view, then press **ENTER**.

To view JPEG properties:

1 Select a file you want to view properties for.

2 Press **DISC MENU**. A popup menu will appear.

3 Press ▲ or ▼ to select "Properties", then press **ENTER**. Properties for the file, such as camera model and resolution, appear.

To control JPEG playback:

- To go to the next or previous file, press **SKIP ►►I** or **SKIP I◄◄**.
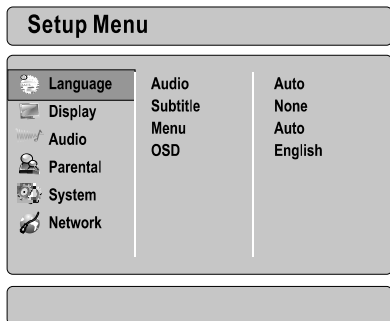- To return to the previous menu, press **RETURN**.

To view JPEG files in a slide show:

1 Press **DISC MENU**. A popup menu will appear.

2 Press ▲ or ▼ to select "Start Slide Show", then press ►. A popup menu will appear with a list of effects you can choose for the slide show.

3 Press ▲ or ▼ to select "Blend", "Film", "Shutter", "Fade", "Curtain", or "None", then press **ENTER**. The slide show starts.

4 To change the slide show effect, press **DISC MENU**, then press ▲ or ▼ to select "Slide Show Effect". Press ►, then press ▲ or ▼ to select an effect, then press **ENTER**.

Quick guide for Setup Menu operation

1 Press **TV/BD** to select Blu-ray mode.

2 Press **SETUP**. The Setup Menu will appear.

Setup Menu

Language	Audio	Auto
Display	Subtitle	None
Audio	Menu	Auto
Parental	OSD	English
System		
Network		

3 Press ▲ or ▼ to select a menu, then press ► to move to the list of menu options. For detailed information about options you can select.

4 Press ▲ or ▼ to select an option, then press ► to move to the list of sub-options, then press **ENTER**.

5 Press ▲ or ▼ to select a sub-option, then press **ENTER**.

6 Press **SETUP** to remove the Setup Menu.

Setup Menu options

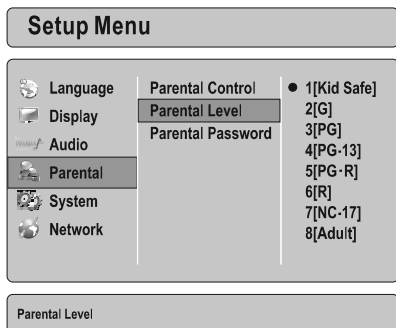| Icon	Option	Description
Language	Audio	Selects the audio language for the disc.
	Subtitle	Selects the subtitle language for the disc.
	Menu	Selects the menu language for the disc.
	OSD	Selects the Setup Menu language. You can select "English", "Français", or "Español".
Display	BD/DVD Output	Selects the picture size, so you can match the size of the TV screen. You can select "16:9 Wide" or "16:9 Pillarbox". Note: For a wide-screen TV, select one of the 16:9 aspect ratios. If you select an aspect ratio that does not match your TV's screen size, the resulting picture display may be unpredictable. • This setting applies to Blu-ray mode only. It changes the aspect ratio for a disc recorded at in a 4:3 format, but does not change the aspect ratio for a disc recorded in a 16:9 format.
Audio	Digital Output	Selects the digital audio output. The option you select depends on the capabilities of the sound system you have connected to unit. • **Bitstream**—Sends the original bitstream from disc over SPDIF using legacy audio formats. Blu-ray Disc audio is limited to the soundtrack for main movie and does not send PIP audio or audio effects. • **Bitstream mixed**—Blu-ray Disc audio streams are mixed and encoded into a single bitstream. Use this option if you are using an SPDIF 5.1CH receiver and you want to enjoy mixed Blu-ray Disc audio in surround sound. • **PCM Stereo**—Sends mixed digital audio over SPDIF in two-channel PCM format. **Note:** When "Bitstream" is selected, unit cannot output secondary audio.
	PCM Downsampling	Selects the digital output PCM sampling rate. Select 48 KHz. • If you set the PCM downsampling rate incorrectly, audio output may be unpredictable.
	Dynamic Range Control	Sets Dynamic Range Control to "On", "Auto", or "Off". Dynamic Range Control is only active when a Dolby Digital signal is received. When you turn on this option and movie soundtracks are played at low volume or from smaller speakers, unit applies compression to make low-level audio more intelligible and prevents loud audio from getting too loud. • **On**—Select this option if you play movies at low volume or if you have small speakers. Unit uses compression to make low-audio content easier to hear and prevent high-audio content from getting too loud. • **Off**—Select this option if you do not want to use the DRC feature. The DRC gain value is ignored, and the audio program is reproduced with full dynamic range.
Parental	Parental Control	See page 29.
	Parental Level	
	Parental Password	
System	Reset Settings	Resets all settings to the factory default. Press **ENTER** after you select this option to reset all settings. The parental controls rating levels you selected are not reset.
	Clear BD Storage	Clears the non-volatile storage (application data area) on a Blu-ray Disc. The application data area is the space on a Blu-ray Disc that stores information such as the subtitle language selection. When you select this option, a confirmation box will appear. If you select OK, unit erases the Blu-ray Disc application data area.
	BD-Live Internet Access	Sets the Internet access level.
	Software Version	Displays unit's software version.
Network	IP Mode	Selects the IP configuration mode. Select Dynamic (uses DHCP to automatically obtain an IP address), Manual (lets you manually configure network settings, such as IP address, subnet mask, and gateway settings), or Off (disables the network interface). • The network cannot be connected to the Internet by way of a proxy server.
	Test Connectivity	Tests unit's Internet connection by "pinging" an IP address. A "ping" sends a message to an internet address and waits for a reply to verify that a connection is working.
	Current IP	Shows unit's current network configuration.
	MAC Address	Shows unit's MAC address.

Setting disc parental controls

To set parental controls:

1 Press **TV/BD** to select Blu-ray mode.

2 Press **SETUP**. The Setup Menu will appear.

3 Press ▲ or ▼ to select "Parental", then press ►. "Please Input 4-digit Parental Password" screen will appear.

4 Press "**0000**" using **Number buttons (0-9)**. (This is pre-setting password of this unit).

Setup Menu

Language	**Parental Control**	● Off
Display	Parental Level	On
Audio	Parental Password	
Parental		
System		
Network		
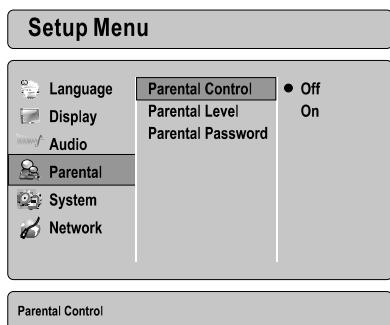
Parental Control

5 Press ► then press ▲ to select "Off". Then press **ENTER**. Parental Control must be set to "Off" before you can adjust the parental controls.

6 Press ◄ to return to the previous level, then press ▲ or ▼ to select, "Pareatal Level", then press **ENTER**.

Setup Menu

Language	Parental Control	● 1[Kid Safe]
Display	**Parental Level**	2[G]
Audio	Parental Password	3[PG]
Parental		4[PG-13]
System		5[PG·R]
Network		6[R]
		7[NC-17]
		8[Adult]

Parental Level

7 Press ▲ or ▼ to select the rating you want to block. You can select:
- **1[Kid Safe]**—Suitable for all children.
- **2[G]**—General audiences.
- **3[PG]**—Parental guidance suggested.
- **4[PG-13]**—Not suitable for anyone under 13.
- **5[PG-R]**—Parental guidance recommended.
- **6[R]**—Not suitable for anyone under 17 unless supervised by a parent or adult guardian.
- **7[NC-17]**—Not suitable for anyone under 17.
- **8[Adult]**—All DVDs can be played.

8 Press **ENTER**, then press ◄ to save your selection and return to the previous menu level.

9 Press ▲ to select "Parental Control", then press ►.

10 Press ▼ to select "On". Then press **ENTER**.

11 Press ◄ to save your setting and return to the previous menu level. Parental Control must be set to On for parental controls to work.
Or Press **SETUP** to close the Setup Menu.

To change the password:

1 Press **TV/BD** to select Blu-ray mode.

2 Press **SETUP**. The Setup Menu will appear.

3 Press ▲ or ▼ to select "Parental", then press ►. "Please Input 4-digit Parental Password" screen will appear.

4 Press "**0000**" using **Number buttons (0-9)**. (This is pre-setting password of this unit).

5 Press ▼ to select "Parental Password", then press ►.

6 Press ▲ or ▼ to select "Default" (resets the password to 0000) or "User Define" (lets you set the password).

7 If you selected "User Define", press **ENTER**, then press the number buttons to enter the new password.

8 Press ◄ to save your password and return to the previous menu level.

NOTE:
- If you forget the password, contact Customer Service at 1-800-289-0980. The original remote control will be required.

Connections to other equipment

The exact arrangement you use to interconnect various video and audio components to this unit is dependent on the model and features of each component. Check the Owner's Manual provided with each component for the location of video and audio inputs and outputs.

To connect the LCD TV/BD to a VCR

Rear of the unit

To Audio/Video OUT

VCR

Audio/Video cord (not supplied)
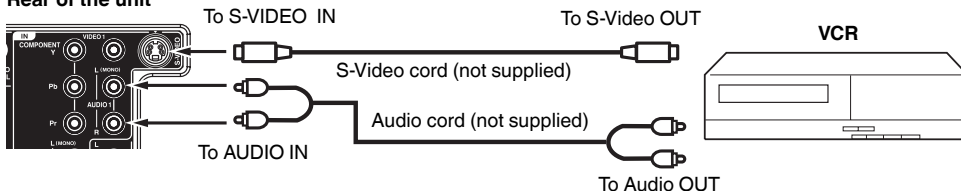
To VIDEO/AUDIO IN
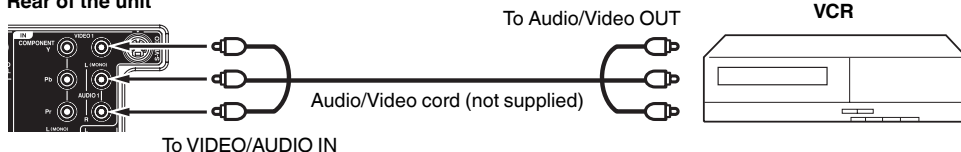
To connect the LCD TV/BD to a VCR with an S-Video cord

If you connect a VCR with a S-Video cable to the S-VIDEO IN jack on the rear side of the unit, you must also connect the audio cables to the AUDIO1 IN jacks on the rear side of the unit.
The S-Video cable only carries the video signal. The audio signal is separate.

NOTE:
• When the S-Video cable and the standard video cable are connected at the same time, the S-Video cable takes precedence.

Rear of the unit

To S-VIDEO IN   To S-Video OUT

VCR

S-Video cord (not supplied)

Audio cord (not supplied)

To AUDIO IN

To Audio OUT

To connect to a DVD player with Component Video Input

You can enjoy a high quality picture by connecting the unit's COMPONENT VIDEO OUT jacks of your DVD player with the COMPONENT video cables (not supplied).

Rear of the unit

To Component OUT

Component video cord (not supplied)

Y
P_B
P_R

DVD

Y
P_B
P_R

To LINE 2 AUDIO IN

Audio cord (not supplied)

To COMPONENT IN

To Audio OUT
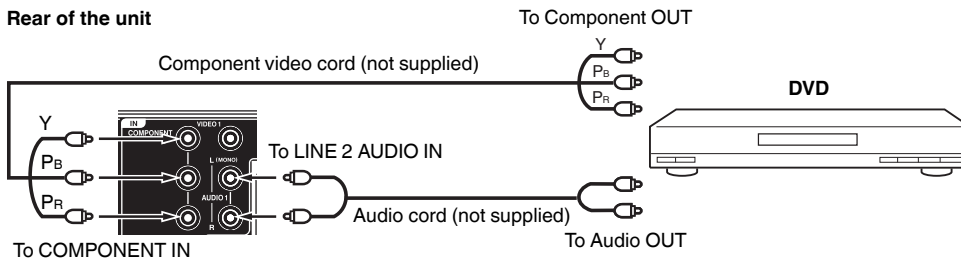
NOTE:
• Component Video input of the unit are for use with a device which output 480i/1080i interlaced signals and 480p/720p progressive signals.

Connections to other equipment   (continued)

To connect a HDMI or a DVI device to the unit

The HDMI 1 input receives digital audio and uncompressed video from a HDMI device or uncompressed digital video from a DVI device.

When you connect to a DVI device with a HDMI-to-DVI adapter cable, it transfers only video signal. Separate analog audio cords required.
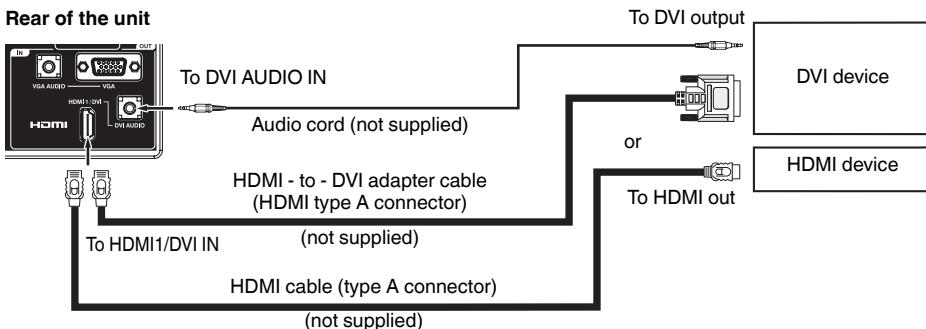
Rear of the unit

To DVI output

DVI device

To DVI AUDIO IN

Audio cord (not supplied)

or

HDMI device

HDMI - to - DVI adapter cable
(HDMI type A connector)

To HDMI out

To HDMI1/DVI IN   (not supplied)

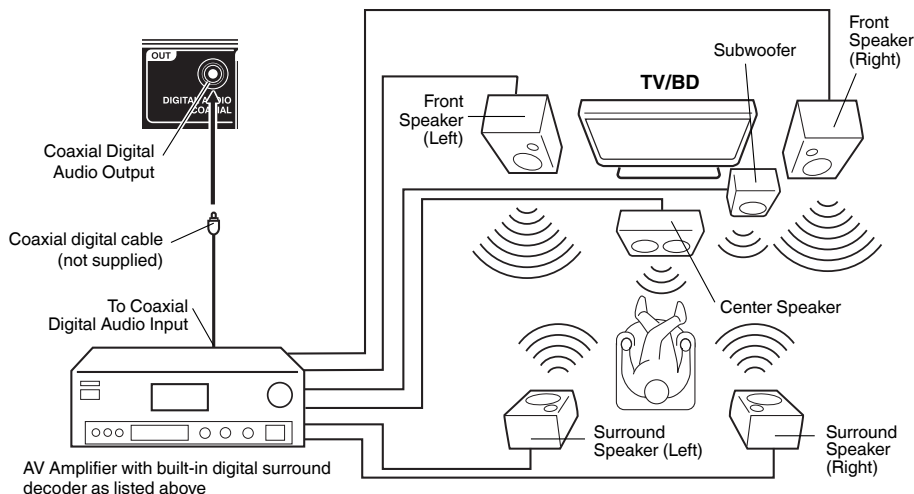HDMI cable (type A connector)

(not supplied)

NOTE:
• **When using HDMI 1/DVI to connect your HDMI or DVI devices, you must select the corresponding audio input source (HDMI or DVI) on the menu screen (see page 17). Otherwise you will only see the image with no sound.**
• If you connect an external component (cable box, satellite receiver, etc.) to this LCD TV using an HDMI cable or a DVI to HDMI cable, the image will not display if the output resolution of the component is set to 480i. To receive the picture you must change the output resolution on the external component.
   Should you require further instruction, please contact the manufacturer of the external component.

Using an AV Amplifier with built-in digital surround

If you are using an Amplifier with built-in digital surround sound, you can enjoy various audio systems including Dolby Digital Surround audio that sounds just like the movie.

Connect an AV amplifier with built-in Dolby Digital decoder, DTS decoder, or MPEG decoder etc. as shown below.

Rear of the unit

Front Speaker (Right)

Subwoofer

TV/BD

Front Speaker (Left)

Coaxial Digital Audio Output

Coaxial digital cable (not supplied)

Center Speaker

To Coaxial Digital Audio Input

AV Amplifier with built-in digital surround decoder as listed above

Surround Speaker (Left)

Surround Speaker (Right)

NOTE:
• When you are viewing digital broadcast, this unit will not work in conjunction with DTS audio or MPEG audio. There will be no sound output if connected to an AV amplifier with a built-in DTS decoder or MPEG decoder.

Connections to other equipment   (continued)

To connect an audio system
This connection allows you to use an audio amplifier and external speakers, and adjust the audio level using the TV's remote control.
To control the audio, turn on the TV and the stereo amplifier, and turn off the TV's built-in speakers (see page 17).

Left side of the TV

Amplifier

To Audio (L) Input   To Audio (R) Input

Audio cord (not supplied)
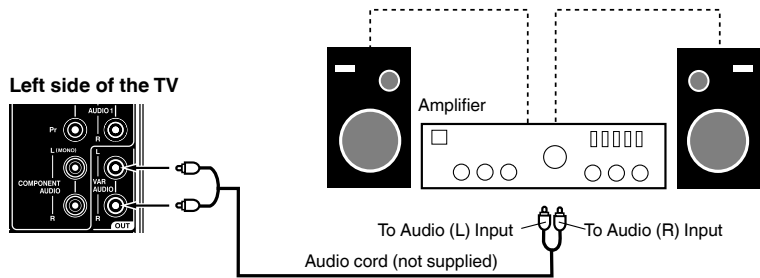
NOTE:
To hear sound when using an external audio amplifier, the volume of both the TV and the amplifier must be set above 0 (zero).
For example, if the volume of the TV is set to 0, you will not be able to hear any sound, even if the volume of the amplifier is at its highest level.

To connect the TV/BD to a camcorder, or a TV Game
To playback from a camcorder, connect the camcorder to the unit as shown.
This unit can also be used as a display device for many video games. However, due to the wide variety of signals generated by these devices and subsequent hook-up variations required, they have not all been included in the suggested connection diagrams. You'll need to consult each component's Owner's Manual for additional information.

Rear of the unit

To VIDEO/AUDIO IN

To Audio/Video OUT

Audio/Video cord
(not supplied)

or   TV GAME
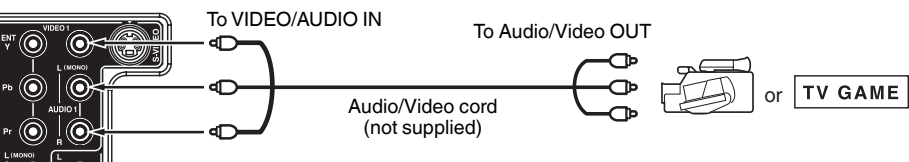
**To connect the TV/BD to a PC (Personal Computer)**
Before you connect this TV/BD to your PC, change the adjustment of your PC's Resolution and Refresh rate (60 Hz).
Connect one end of a (male to male) VGA cable to the video card of the computer and the other end to the VGA connector VGA on the rear of the TV/BD. Attach the connectors firmly with the screws on the plug. In case of a Multimedia computer, connect the audio cord to the audio output of your Multimedia computer and to the AUDIO connector of the VGA AUDIO IN jack of the TV/BD. You can also connect the PC with HDMI cable. If you use HDMI cable, you don't have to connect the audio cord. If you use DVI-to-HDMI cable, please connect audio cord as same way as VGA cable.
Press **INPUT** on the remote control to select PC mode.
Switch on the computer. The TV/BD can operate as the computer monitor.

Rear of the unit

To VGA AUDIO IN

To VGA IN

PC

To
HDMI
IN

VGA cable
(not supplied)

HDMI cable (not supplied)
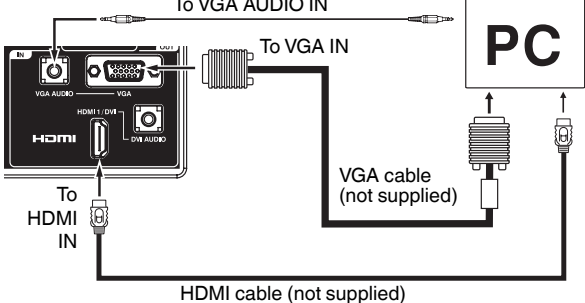
Monitor Display modes

MODE	Resolution	Refresh rate
VGA	640x480	60/ 72/ 75 Hz
VGA	720x400	70Hz
SVGA	800x600	56/ 60/ 72/ 75 Hz
XGA	1024x768	60/ 72/ 75 Hz
WXGA	1280x768	60Hz
WXGA	1280x720	60Hz
WXGA	1360x768	60Hz
SXGA	1280x1024	60Hz
WXGA+	1440x900	60Hz
FHD	1920x1080	60Hz

To return to normal mode
Press **INPUT** again.

NOTE:
• The on-screen displays will have a different appearance in PC mode than in TV mode.
• If there is no video signal from the PC when the unit is in PC mode, "No signal" will appear on the TV-screen.

32

Reception disturbances

Most types of television interference can be remedied by adjusting the height and position of the VHF/UHF antenna. Outdoor antennas are recommended for best results. The most common types of television interference are shown below. If one of these symptoms appear when the TV is connected to a Cable TV system, the disturbance may be caused by the local Cable TV company broadcast.

IGNITION
Black spots or horizontal streaks may appear, the picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps or AC powered tools and appliances such as drills or hair dryers.

GHOSTS
Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected by tall buildings, hills or other large objects. Changing the direction or position of the antenna may improve the reception.

SNOW
If the TV is located far from the TV station, in a fringe reception area where the signal is weak, small dots may appear in the picture.
If the signal is extremely weak, the installation of a larger external antenna may be necessary.

RADIO FREQUENCY INTERFERENCE (RFI)
Caused by two-way radios, this type of interference produces moving ripples or diagonal streaks in the picture. Some cases may cause a loss of contrast in the picture. Changing the direction and position of the antenna or installing an RFI filter may improve the picture.

PICTURE SIZE VARIATION
A slight picture size variation is normal when you adjust the CONTRAST or BRIGHTNESS settings.

CARE AND MAINTENANCE
To prevent fire or shock hazard, disconnect the TV from the power source before cleaning.
The finish on the cabinet may be cleaned with mild soap and a soft, damp cloth and cared for as other furniture.
Use caution when cleaning or wiping the plastic parts.

Problems and troubleshooting

Use the following check list for troubleshooting when you have problems with your TV/Blu-ray. Consult your local dealer or service outlet if problems persist.
Be sure all connections are properly made when using with other units.

SYMPTOMS	POSSIBLE SOLUTIONS	PAGE
POWER		
TV/BD does not operate.	• Make sure the power cord is plugged in. • Power is off, check fuse or circuit breaker. • Unplug unit, then plug it back in.	12
TV BROADCAST RECEPTION		
Poor sound or no sound.	• Station or Cable TV experiencing problems, tune to another station. • Check Volume adjustments or muting. • Check for sources of possible interference.	15 15, 16 32
Poor picture or no picture.	• Station or Cable TV experiencing problems, tune to another station. • Check antenna or Cable TV connections, reorient antenna. • Check for sources of possible interference. • Check picture control adjustments.	15 13, 14 32 17
Poor reception on some channels.	• Station or Cable TV experiencing problems, tune to another station. • Station signal is weak, reorient antenna to receive stronger station. • Check for sources of possible interference.	15 13 32
Poor color or no color.	• Station or Cable TV experiencing problems, tune to another station. • Make sure channels are set into memory. • Check picture control adjustments. • Check antenna or Cable TV connections, reorient antenna. • Check for sources of possible interference.	15 18 17 13, 14 32
Picture wobbles or drifts.	• Station or Cable TV experiencing problems, tune to another station. • Make sure channels are set into memory. • Cable TV company is scrambling signal. • Check antenna orientation.	15 18 – 13
No Cable TV reception.	• Check all Cable TV connections. • Set Signal Type option to the "Cable" mode. • Station or Cable TV system problems, try another station.	14 18 15
Horizontal or diagonal bars on screen.	• Check antenna connections, reorient antenna. • Check for sources of possible interference.	13 32
No reception above channel 13.	• Make sure Signal Type option is in the appropriate mode. • If using antenna, check UHF antenna connections.	18 13
TV shuts off.	• No broadcast on station tuned. • Sleep Timer is set. • Power interrupted.	15 16 –
Closed - Caption is not activated.	• TV station experiencing problems or program tuned is not closed captioned. Try another channel. • Check Cable TV connection or VHF/UHF antenna, reposition or rotate antenna. • Set Closed caption in the menu.	15 13, 14 21
Display is not shown in your language.	• Select proper language in the menu options.	15

• The LCD panel is a very high technology product, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

Problems and troubleshooting   (continued)

SYMPTOMS	POSSIBLE SOLUTIONS	PAGE
Blu-ray Disc		
TV/Blu-ray combo does not work	• A built-in safety device may have been activated. Press **POWER** on the side of unit to turn it off, then turn it on again. If unit still does not turn on, unplug the power cord, wait about one minute, plug it in again, then press **POWER** on the side of unit.	–
	• Condensation may have formed inside unit. Turn off unit and wait about two to three hours for the condensation to evaporate.	–
Playback will not start, or playback starts then stops	• If you see ⃠, the action you are trying is not allowed by unit or the disc.	23
	• Make sure that the disc is inserted with the label facing forward.	23
	• Make sure that the disc is not dirty.	6
	• The disc may be blank or not compatible with your TV/Blu-ray combo.	6
Startup is slow	• Startup may be slow if the TV is connected to the HDMI cable.	–
	• Startup may be slow the first time you plug in the power cord or after a power failure.	–
Disc tray opens automatically while playing	• Make sure that the disc is not dirty.	6
	• The disc may be blank or not compatible with unit.	6
	• Try resetting your player. Press **POWER**, wait five seconds, then press **POWER** again.	–
The player is on and displays the start logo and menu, but there is no image from the disc displayed	• Make sure that the disc is not dirty.	6
	• Try resetting your player. Press **POWER**, wait five seconds, then press **POWER** again.	–
BD-Live and USB connections		
Cannot connect to the Internet	• Make sure that the Internet connection is set up correctly.	–
	• Test the Internet connection to make sure that it is working.	–
	• Make sure that the BD-Live Internet Access option is not set to Prohibit Access.	28
	• Make sure that the disc you are playing is a legal copy.	6
After connecting to the Internet, cannot download a file	• BD storage may be full. Try clearing storage.	–
	• Make sure that the Internet connection is still working. Try testing the connection.	–
	• If you are using a USB drive, try a different drive.	–
File downloaded successfully, but playback pauses	• Make sure that the USB drive is a 2.0 USB device. If the drive is a 1.1 USB device, pausing can occur.	–
When playing a file on a USB drive, playback pauses.	• Try another USB drive.	–
REMOTE CONTROL		
The remote control does not function.	• Aim at the remote control at the remote sensor.	12
	• Operate within Approx. 15 feet or reduce the light in the room.	
	• Clear the path of the beam.	
	• The batteries are weak. Replace the batteries.	
	• Check the batteries are inserted correctly.	

Specifications

GENERAL	
Power supply:	AC 120V 60Hz
Power consumption:	Operation: 130W Stand by: 0.7W
Weight:	13.6 kg (30.0 lbs)
Dimensions:	Width: 796 mm (31-5/16 inches) Height: 549 mm (21-5/8 inches) Depth: 300 mm (11-13/16 inches)
Operating temperature:	5˚C - 35˚C
Operating humidity:	Less than 80%

TELEVISION	
Type:	80.1 cm (32" class/31.55" diagonal)
Display method:	Transmission TFT color LCD panel
Number of Pixels:	1920 (H) x 1080 (V)
Tuner type:	US system M ATSC standard (8VSB), QAM

Receiving channels:	VHF 2-13
	UHF 14-69
	CATV 14-36 (A)-(W)
	              37-59 (AA)-(WW)
	              60-85 (AAA)-(ZZZ)
	              86-94 (86)-(94)
	              95-99 (A-5)-(A-1)
	              100-135 (100)-(135)
	              01 (4A)

Inputs:	S-Video: Y-Input:1.0 V (p-p), 75 ohms
	                  C-Input:0.3 V (p-p), 75 ohms
	Video: (RCA) 1 V p-p/75 ohms
	Audio: (RCA) –8 dBm/50K ohms
	Component video: (Y) 1 V (p-p), 75 ohms
	                                 (Pb)/(Pr) 0.7 V (p-p), 75 ohms
	HDMI: HDMI compliant (type A connector)
	              HDCP compliant
	              E-EDID compliant
	              Suggested scan rates: 480p, 480i, 720p,1080i,1080p
	              HDMI Audio: 2-channel PCM
	                                32/44.1/48 kHz sampling frequency
	                                16/20/24 bits per sample
	PC Monitor: Mini-Dsub 15pin x 1
	USB: USB 2.0
	Antenna: VHF/UHF In 75 ohms coaxial

Outputs:	Digital audio out: 0.5 Vp-p 75 ohms terminated
Speaker:	40.6 mm x 121.9 mm (1-5/8 inches x 4-13/16 inches), 8 ohms x 2
Audio output power:	10.0W + 10.0W

DVD/CD player	
Signal system:	NTSC
Applicable disc:	BD-ROM, BD-JAVA 1.1, DVD-video,DVD-RW/- R, CD-RW/-R

ACCESSORIES	Remote control Batteries (UM-3) x 2 AC Cord Stand Screw x 4 Stand

Designs and specifications are subject to change without notice.